

APPENDIX D

Complete Set of Currently Pending Claims

1. A drum comprising:

a side wall comprising a plurality of side wall sections connected by corner sections, the side wall having end portions disposed at longitudinal ends thereof;

first and second end walls located adjacent the end portions, the first end wall defining a fill/drain opening therein;

a circumferential carrying and transport rim disposed on at least one of the end portions and configured for carrying the drum with drum handling equipment; and

a first indentation formed on the side wall substantially intermediate the end portions, the first indentation configured and dimensioned to resist buckling of the side wall, wherein the drum defines a longitudinal axis between the end portions, and the indentation extends substantially circumferentially about the side wall around the longitudinal axis and is substantially V-shaped and deepest at the corner sections, wherein the first indentation is substantially V-shaped in a plane extending substantially parallel to the longitudinal axis.

4. The drum of claim 1, wherein the side wall sections define a substantially rectangular cross-section of the side wall, and the first indentation defines a substantially circular cross-section of the side wall.

6. The drum of claim 1, wherein the drum defines a drum height between the end portions and substantially parallel to the longitudinal axis, and the first indentation is disposed in a plane located at about 30% to about 70% of the drum height.

7. The drum of claim 1, wherein the side wall further comprises a second indentation formed thereon, and the second indentation extends substantially in a direction of the longitudinal axis.

8. The drum of claim 1, further comprising a reinforcing ring disposed adjacent one of the end portions, the reinforcing ring having at least one arcuate portion and being dimensioned to allow

rolling of the drum about the reinforcing ring.

9. The drum of claim 1, further comprising at least one reinforcing rib formed in the end walls.

10. A drum comprising:

a side wall comprising:

a first portion having a plurality of side wall sections that define a first circumferential cross-section,

a second portion comprising angular indentations in the side wall disposed at intersections between the side wall sections defining a second circumferential cross-section that is different than the first cross-section and configured and dimensioned to resist buckling of the side wall, and

end portions disposed at longitudinal ends of the side wall;

first and second end walls located adjacent the end portions, the first end wall comprising a recessed well; and

a fill/drain opening defined in the recessed well;

wherein the first cross-section is substantially rectangular, and the second cross-section is substantially circular.

11. The drum of claim 10, wherein the second portion divides the first portion into upper and lower sections.

12. The drum of claim 10, wherein the drum defines a drum height between the end walls and substantially perpendicular to one of the end walls, and the second portion is located at about 30% to about 70% of the drum height.

13. The drum of claim 10, wherein the first cross-section is substantially square.

15. The drum of claim 10, wherein the angular indentations are substantially V-shaped and are deepest at the intersections and transition into the side wall sections such that the second cross-section is substantially circular.

16. The drum of claim 15, wherein the indentations are spaced apart a predetermined distance such that each indentation does not transition into each adjacent indentation.

17. The drum of claim 10, wherein the drum defines a drum height along the longitudinal axis and between the end portions, wherein the indentations are disposed in a plane located at about 30% to about 70% of the drum height.

18. The drum of claim 10, further comprising a protrusion formed one of the walls for stiffening the at least one wall.

19. A drum comprising:

a side wall comprising a first portion having a plurality of side wall sections that define a substantially rectangular first cross-section of the side walls, the side wall having end portions disposed at longitudinal ends thereof;

a protrusion formed in the side wall substantially intermediate the end portions to resist buckling of the side wall, the protrusion defining a substantially circular second cross-section of the side wall;

first and second end walls located adjacent the end portions, the first end wall defining a fill/drain opening; and

a circumferential carrying and transport rim disposed on at least one of the end portions and configured for carrying with drum handling equipment.

20. The drum of claim 19, wherein the first cross-section is substantially square.

22. The drum of claim 19, wherein the protrusion protrudes inwardly into the drum.

23. The drum of claim 19, wherein the protrusion extends substantially circumferentially.
25. The drum of claim 19, wherein the side wall has a substantially uniform thickness.
26. The drum of claim 19, wherein the first cross-section comprises four convex wall sections connected by four radiused corner sections, and a first radius is measured from a center of the first cross-section to a midpoint of the wall sections, and a second radius is measured from the center of the first cross-section to a midpoint of the corner sections, wherein the second radius is between about 10% and about 50% longer than the first radius.
27. The drum of claim 19, wherein the drum is of plastic material and has a volumetric capacity of between about 10 gallons and about 80 gallons, and at least one of the wall sections is reinforced such that the drum can support at least one second similar drum that is substantially filled and stacked on top of the drum for resisting buckling of the wall sections.
28. The drum of claim 19, wherein the circumferential carrying and transport rim comprises an outwardly protruding lip substantially having an L-shape and configured such that the drum can be lifted by the transport rim using drum handling equipment.
29. The drum of claim 1, wherein the first indentation is deepest at the corner sections and becomes shallower as it transitions into the side wall sections.
31. The drum of claim 19, wherein the drum defines a drum height between the end portions, and the protrusion is disposed in a plane located at about 30% to about 70% of the drum height.
32. The drum of claim 19, wherein the first cross-section is substantially square.
33. The drum of claim 19, wherein the side wall sections are joined by corner sections, and the protrusion is substantially V-shaped at the corner sections.

34. A drum comprising:

a side wall comprising a plurality of side wall sections connected by corner sections, the side wall having end portions disposed at longitudinal ends thereof, wherein the drum defines a longitudinal axis between the end portions;

first and second end walls located adjacent the end portions, the first end wall defining a fill/drain opening therein;

a circumferential carrying and transport rim disposed on the drum and configured for carrying the drum with drum handling equipment; and

an angular indentation formed on the side wall intermediate the end walls, wherein the indentation is deeper at the corner sections than it is at a point on at least one of the side wall sections intermediate the corner sections, and the indentation is substantially V-shaped in a plane extending substantially parallel to the longitudinal axis.

35. The drum of claim 34, wherein the indentation is shallowest at a point on the side wall sections intermediate the corner sections.

36. The drum of claim 34, wherein the indentation is substantially V-shaped and deepest at the corner sections.

38. The drum of claim 34, wherein the side wall sections define a first circumferential cross-section that is substantially square, and the angular indentation defines a second circumferential cross-section that is substantially circular.

39. A drum comprising:

a side wall comprising a plurality of side wall sections connected by corner sections, the side wall having end portions disposed at longitudinal ends thereof;

first and second end walls located adjacent the end portions, the first end wall defining a fill/drain opening therein;

a circumferential carrying and transport rim disposed on the drum and configured

for carrying the drum with drum handling equipment; and

an indentation formed on the side wall substantially intermediate the end walls, wherein the indentation defines a vertical thickness that varies around the circumference of the side wall.

40. The drum of claim 39, wherein the thickness is greatest at the corner sections.

41. The drum of claim 39, wherein the thickness is smallest at a point on at least one of the side wall sections substantially intermediate the corner sections.

43. The drum of claim 39, wherein the indentation is substantially V-shaped and deepest at the corner sections.

44. The drum of claim 39, wherein the side wall sections define a first circumferential cross-section that is substantially square, and the indentation defines a second circumferential cross-section that is substantially circular.

45. A drum comprising:

a side wall comprising a plurality of side wall sections connected by corner sections, the side wall having end portions disposed at longitudinal ends thereof;

first and second end walls located adjacent the end portions, the first end wall defining a fill/drain opening therein;

a circumferential carrying and transport rim disposed on the drum and configured for carrying the drum with drum handling equipment; and

an indentation formed on the side wall intermediate the end walls;

wherein:

the indentation defines a vertical thickness that varies around the circumference of the side wall; and

the indentation is deeper at the corner sections than it is at a point on at least one of the side wall sections intermediate the corner sections.